



1801 South 2nd Street, Ste. 330 McAllen, TX 78503

Addendum No. 4

DATE: Tuesday, June 11, 2019

PROJECT: Tropical Texas Behavioral Health-Ambulatory Service Facility

PROJECT NO: 1591801

LOCATION: 871 Old Alice Road, Brownsville, Texas 78520

FROM: Laura N. Warren, The Warren Group Architects, Inc.

The following revisions and clarifications shall be considered part of the record contract documents dated May 17, 2019 for the above referenced project and included in the contract amount. All general notes and specifications shall apply to this addendum. Where provisions of the following supplementary data differ from those of the original Contract Documents, this Addendum shall govern and take precedence.

The following scope adjustments have been made. Please adjust bids with the following noted changes:

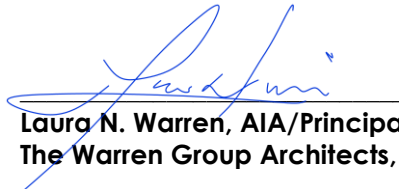
Specifications

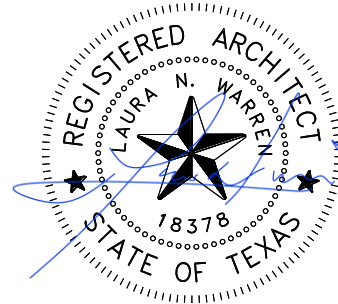
- Item No. 1:** As requested by Owner Representative, the proposal opening date has been extended to Monday, 06/24/2019 in lieu of 06/14/2019. Time and location remain the same.
- Item No. 2:** Refer to Project Manual Spec Section 08 71 00 Door Hardware dated 05/17/2019. **Door Hardware Clarification: Revised to meet TDI Standards. Refer attached Door Hardware ADD4 dated 06/10/2019. Insert this Section.**
- Item No. 3:** Refer to Project Manual Spec Section 32 1723.13 Painted Pavement Markings dated 05/17/2019. **Clarification from PCE Perez Consulting Engineers; reference Item 1.04 Subsidiary to Project Cost: There are no Allowances. Pavement markings to be part of the Base Proposal subsidiary to all other items of work.**
- Item No. 4:** Refer to Clarification from MEP Solutions Engineering; Intrusion detection is backbox and conduits only. There is no specification for it.

Drawings

- Item No. 5:** Refer to Construction Documents Sheet A2.12 dated 05/17/2019. **General Contractor to coordinate with Fast Signs of RGV. (Contact No. 956-618-1800) for "Exterior Building" signage in Sheet A2.12 Elevation 2; in lieu of Signage by Owner.**

ISSUED BY:


Laura N. Warren, AIA/Principal
The Warren Group Architects, Inc.



Attachments:

PDF Format – 8.5"x11" 08 71 00 Door Hardware ADD 4 dated 06/11/2019

Distribution:

Bidding Vendors
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SECTION 08 71 00
DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes commercial door hardware for the following:

1. Swinging doors.
2. Other doors to the extent indicated.

- B. Door hardware includes, but is not necessarily limited to, the following:

1. Mechanical door hardware.
2. Electromechanical door hardware.
3. Automatic operators.
4. Cylinders specified for doors in other sections.

- C. Related Sections:

1. Division 08 Section "Door Hardware Schedule".
2. Division 08 Section "Hollow Metal Doors and Frames".
3. Division 08 Section "Flush Wood Doors".
4. Division 08 Section "Automatic Door Operators".
5. Division 08 Section "Access Control Hardware".

- D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ASTM E1886 - Test Method for Performance of Exterior Windows, Curtain Walls, Doors and Shutters Impacted by Missiles and Exposed to Cyclic Pressure Differentials.
3. ASTM E1996 - Standard specification for performance of exterior windows, curtain walls, doors and storm shutters impacted by Windborne Debris in Hurricanes.
4. ICC/IBC - International Building Code.
5. NFPA 70 - National Electrical Code.
6. NFPA 80 - Fire Doors and Windows.
7. NFPA 101 - Life Safety Code.
8. NFPA 105 - Installation of Smoke Door Assemblies.
9. UL/ULC and CSA C22.2 – Standards for Automatic Door Operators Used on Fire and Smoke Barrier Doors and Systems of Doors.
10. State Building Codes, Local Amendments.

E. Standards: All hardware specified herein shall comply with the following industry standards:

1. ANSI/BHMA Certified Product Standards - A156 Series
2. UL10C – Positive Pressure Fire Tests of Door Assemblies

1.3 SUBMITTALS

A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.

B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
3. Content: Include the following information:
 - a. Type, style, function, size, label, hand, and finish of each door hardware item.
 - b. Manufacturer of each item.
 - c. Fastenings and other pertinent information.
 - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - e. Explanation of abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for door hardware.
 - g. Door and frame sizes and materials.
 - h. Warranty information for each product.

4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.

C. Shop Drawings: Details of electrified access control hardware indicating the following:

1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:

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- a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.
 - b. Complete (risers, point-to-point) access control system block wiring diagrams.
 - c. Wiring instructions for each electronic component scheduled herein.
2. Electrical Coordination: Coordinate with related sections the voltages and wiring details required at electrically controlled and operated hardware openings.
- D. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.
- E. Proof of Compliance: (California located Projects): Provide a list of product(s) containing chemicals known to cause cancer or reproductive toxicity as defined by the Office of Environmental Health Hazard Assessment (OEHHA) under Proposition 65 (CA Code of Regulations, Title 27, Section 27001). The list includes the specific chemical(s), if the chemical will be exposed to consumers, the means of warning, and an illustration of the label.
- F. Informational Submittals:
1. Hurricane Resistant Openings: Exterior hurricane opening assemblies to be tested according to ASTM E330, ASTM E1886, ASTM E1996 standards, and certified by a qualified independent third party testing agency acceptable to authority having jurisdiction, with labeling indicating compliance with the wind load and design pressure level requirements specified for the Project.
 2. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.
- G. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Submittals.
- 1.4 QUALITY ASSURANCE
- A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.
 - B. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
 - C. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this

Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

- D. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.
1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
 2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.
- E. Hurricane Resistant Exterior Openings (State of Texas): Provide exterior hollow metal and door hardware assemblies approved by the Texas Department of Insurance, including anchorage, capable of withstanding wind load design pressures calculated for this project by a registered architect or engineer and are part of the construction documents per the Texas Department of Insurance, authorities having jurisdiction, and the International Building Code Design Loads Section 1609.
1. Each unit to bear third party permanent label in accordance with the Texas Department of Insurance requirements applicable to project.
 2. Hurricane Resistance Test Performance: Provide hollow metal and door hardware approved assemblies that pass large missile-impact tests, as required by Texas Department of Insurance systems location above grade and cyclic-pressure tests according to testing requirements of authorities having jurisdiction.
 - a. Impact Resistance: Hollow metal with approved door hardware assemblies must satisfy the Texas Department of Insurance's criteria for protection from windborne debris in both the Inland I zone and the Seaward zone. Assemblies must pass the large missile impact test (which equates to Missile Level D specified in ASTM E 1996-02). Assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded.
- F. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.
- G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:
1. Function of building, purpose of each area and degree of security required.
 2. Plans for existing and future key system expansion.
 3. Requirements for key control storage and software.
 4. Installation of permanent keys, cylinder cores and software.
 5. Address and requirements for delivery of keys.
- H. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s),

Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.

1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
 2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
 3. Review sequence of operation narratives for each unique access controlled opening.
 4. Review and finalize construction schedule and verify availability of materials.
 5. Review the required inspecting, testing, commissioning, and demonstration procedures
- I. At completion of installation, provide written documentation that components were applied to manufacturer's instructions and recommendations and according to approved schedule.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
- B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.
- C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.6 COORDINATION

- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.
- B. Door Hardware and Electrical Connections: Coordinate the layout and installation of scheduled electrified door hardware and related access control equipment with required connections to source power junction boxes, low voltage power supplies, detection and monitoring hardware, and fire and detection alarm systems.
- C. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.7 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
 - 1. Structural failures including excessive deflection, cracking, or breakage.
 - 2. Faulty operation of the hardware.
 - 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - 4. Electrical component defects and failures within the systems operation.
- C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.
- D. Special Warranty Periods:
 - 1. Ten years for mortise locks and latches.
 - 2. Seven years for heavy duty cylindrical (bored) locks and latches.
 - 3. Five years for exit hardware.
 - 4. Twenty five years for manual surface door closer bodies.
 - 5. Five years for motorized electric latch retraction exit devices.
 - 6. Two years for electromechanical door hardware.

1.8 MAINTENANCE SERVICE

- A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.
- B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:
 - 1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.

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- C. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

2.2 HANGING DEVICES

- A. Hinges: ANSI/BHMA A156.1 certified butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.
1. Quantity: Provide the following hinge quantity:
 - a. Two Hinges: For doors with heights up to 60 inches.
 - b. Three Hinges: For doors with heights 61 to 90 inches.
 - c. Four Hinges: For doors with heights 91 to 120 inches.
 - d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.
 2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:
 - a. Widths up to 3'0": 4-1/2" standard or heavy weight as specified.
 - b. Sizes from 3'1" to 4'0": 5" standard or heavy weight as specified.
 3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:
 - a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
 - b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.
 - c. Tornado Resistant Assemblies: At a minimum, provide heavy weight hinges with stainless steel screws used in accordance with and specified as part of a Severe Storm Shelter Opening meeting ICC 500 and FEMA 361.
 4. Hinge Options: Comply with the following:
 - a. Non-removable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.
 5. Manufacturers:
 - a. Hager Companies (HA).
 - b. Ives (IV).
 - c. McKinney Products; ASSA ABLOY Architectural Door Accessories (MK).

2.3 POWER TRANSFER DEVICES

- A. Electrified Quick Connect Transfer Hinges: Provide electrified transfer hinges with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Manufacturers:

- a. Hager Companies (HA) - ETW-QC (# wires) Option.
- b. McKinney Products; ASSA ABLOY Architectural Door Accessories (MK) - QC (# wires) Option.

- B. Electrified Quick Connect Continuous Geared Transfer Hinges: Provide electrified transfer continuous geared hinges with a 12" removable service panel cutout accessible without demounting door from the frame. Furnish with Molex™ standardized plug connectors with sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Manufacturers:

- a. Ives (IV) – TWP-CON Option.
- b. McKinney Products; ASSA ABLOY Architectural Door Accessories (MK) - SER-QC (# wires) Option.
- c. Pemko Products; ASSA ABLOY Architectural Door Accessories (PE) - SER-QC (# wires) Option.

- C. Electric Door Wire Harnesses: Provide electric/data transfer wiring harnesses with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Provide sufficient number and type of concealed wires to accommodate electric function of specified hardware. Provide a connector for through-door electronic locking devices and from hinge to junction box above the opening. Wire nut connections are not acceptable. Determine the length required for each electrified hardware component for the door type, size and construction, minimum of two per electrified opening.

1. Provide one each of the following tools as part of the base bid contract:

- a. McKinney Products; ASSA ABLOY Architectural Door Accessories (MK) - Electrical Connecting Kit: QC-R001.
- b. McKinney Products; ASSA ABLOY Architectural Door Accessories (MK) - Connector Hand Tool: QC-R003.

2. Manufacturers:

- a. Hager Companies (HA) - Quick Connect.
- b. McKinney Products; ASSA ABLOY Architectural Door Accessories (MK) – QC-C Series.

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- D. Hurricane and Tornado Resistance Compliance: Power transfer devices to be U.L. listed for windstorm components where applicable.

2.4 DOOR OPERATING TRIM

- A. Flush Bolts and Surface Bolts: ANSI/BHMA A156.3 and A156.16, Grade 1, certified.
1. Flush bolts to be furnished with top rod of sufficient length to allow bolt retraction device location approximately six feet from the floor.
 2. Furnish dust proof strikes for bottom bolts.
 3. Surface bolts to be minimum 8" in length and U.L. listed for labeled fire doors and U.L. listed for windstorm components where applicable.
 4. Provide related accessories (mounting brackets, strikes, coordinators, etc.) as required for appropriate installation and operation.
 5. Manufacturers:
 - a. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).
 - b. Trimco (TC).
- B. Coordinators: ANSI/BHMA A156.3 certified door coordinators consisting of active-leaf, hold-open lever and inactive-leaf release trigger. Model as indicated in hardware sets.
1. Manufacturers:
 - a. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).
 - b. Trimco (TC).
- C. Door Push Plates and Pulls: ANSI/BHMA A156.6 certified door pushes and pulls of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.
1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
 2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.
 3. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
 4. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.
 5. Manufacturers:
 - a. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).
 - b. Trimco (TC).

2.5 CYLINDERS AND KEYING

- A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.
- B. Source Limitations: Obtain each type of keyed cylinder and keys from the same source manufacturer as locksets and exit devices, unless otherwise indicated.
 - 1. Manufacturers:
 - a. Schlage (SC).
- C. Cylinders: Original manufacturer cylinders complying with the following:
 - 1. Mortise Type: Threaded cylinders with rings and cams to suit hardware application.
 - 2. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
 - 3. Bored-Lock Type: Cylinders with tailpieces to suit locks.
 - 4. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
 - 5. Keyway: Match Facility Standard.
- D. Permanent Cores: Manufacturer's standard; finish face to match lockset; complying with the following:
 - 1. Interchangeable Cores: Core insert, removable by use of a special key; usable with other manufacturers' cylinders.
- E. Keying System: Each type of lock and cylinders to be factory keyed.
 - 1. Conduct specified "Keying Conference" to define and document keying system instructions and requirements.
 - 2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
 - 3. Existing System: Key locks to Owner's existing system.
- F. Key Quantity: Provide the following minimum number of keys:
 - 1. Change Keys per Cylinder: Two (2)
 - 2. Master Keys (per Master Key Level/Group): Five (5).
 - 3. Construction Keys (where required): Ten (10).
- G. Construction Keying: Provide construction master keyed cylinders.
- H. Key Registration List (Bitting List):
 - 1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
 - 2. Provide transcript list in writing or electronic file as directed by the Owner.

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- I. Key Control Cabinet: Provide a key control system including envelopes, labels, and tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet. Key control cabinet shall have expansion capacity of 150% of the number of locks required for the project.
 1. Manufacturers:
 - a. Lund Equipment (LU).
 - b. MMF Industries (MM).
 - c. Telkee (TK).
 - J. Key Control Software: Provide one network version of "Key Wizard" branded key management software package that includes one year of technical support and upgrades to software at no charge. Provide factory key system formatted for importing into "Key Wizard" software.

2.6 MECHANICAL LOCKS AND LATCHING DEVICES

- A. Mortise Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.13, Series 1000, Operational Grade 1 certified. Locksets are to be manufactured with a corrosion resistant steel case and be field-reversible for handing without disassembly of the lock body.
 1. Manufacturers:
 - a. Corbin Russwin Hardware (RU) – ML2000 Series.
 - b. Sargent Manufacturing (SA) – 8200 Series.
 - c. Schlage (SC) – L9000 Series.
- B. Cylindrical Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.2, Series 4000, Grade 1 certified.
 1. Furnish with solid cast levers, standard 2 3/4" backset, and 1/2" (3/4" at rated paired openings) throw brass or stainless steel latchbolt.
 2. Locks are to be non-handed and fully field reversible.
 3. Extended cycle test: Locks to have been cycle tested in ordinance with ANSI/BHMA 156.2 requirements to 2 million cycles.
 4. Manufacturers:
 - a. Corbin Russwin Hardware (RU) – CL3300 Series.
 - b. Sargent Manufacturing (SA) – 10 Line.
 - c. Schlage (SC) – ND Series.
- C. Hurricane and Tornado Resistance Compliance: Mechanical locking and latching devices to be U.L. listed for windstorm assemblies where applicable. Provide the appropriate hurricane or tornado resistant products that have been independent third party tested, certified, and labeled to meet state and local windstorm building codes applicable to project.

2.7 ELECTROMECHANICAL LOCKING DEVICES

- A. Electromechanical Mortise Locksets, Grade 1 (Heavy Duty): Subject to same compliance standards and requirements as mechanical mortise locksets, electrified locksets to be of type and design as specified below.
1. Electrified Lock Options: Where indicated in the Hardware Sets, provide electrified options including: outside door lock/unlock trim control, latchbolt and lock/unlock status monitoring, deadbolt monitoring, and request-to-exit signaling. Support end-of-line resistors contained within the lock case. Unless otherwise indicated, provide electrified locksets standard as fail secure.
 2. Energy Efficient Design: Provide lock bodies which have a holding current draw of 15mA maximum, and can operate on either 12 or 24 volts. Locks are to be field configurable for fail safe or fail secure operation.
 3. High Security Monitoring: Provide lock bodies which have built-in request to exit monitoring and are provided with accompanying door position switches. Provide a resistor configuration which is compatible with the access control system.
 4. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - ML20900 Series.
 - b. Sargent Manufacturing (SA) - 8200 Series.
 - c. Schlage (SC) - L9000 EL/EU/RX Series.
- B. Electromechanical Cylindrical Locksets, Grade 1 (Heavy Duty): Subject to same compliance standards and requirements as mechanical cylindrical locksets, electrified locksets to be of type and design as specified below.
1. Electrified Lock Options: Where indicated in the Hardware Sets, provide electrified options including: outside door lock/unlock trim control, latchbolt and lock/unlock status monitoring, and request-to-exit signaling. Unless otherwise indicated, provide electrified locksets standard as fail secure.
 2. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - CL33900 Series.
 - b. Sargent Manufacturing (SA) - 10G70/71 Series.
 - c. Schlage (SC) - ND DEL/DEU Series.
- C. Hurricane and Tornado Resistance Compliance: Electromechanical locking devices to be U.L. listed for windstorm assemblies where applicable. Provide the appropriate hurricane or tornado resistant products that have been independent third party tested, certified, and labeled to meet state and local windstorm building codes applicable to project.

2.8 AUXILIARY LOCKS

- A. Mortise Deadlocks, Large Case: ANSI/BHMA A156.13, Series 1000, Grade 1, certified large case mortise type deadlocks constructed of heavy gauge wrought corrosion resistant steel. One

piece stainless steel bolts with a 1" throw. Deadlocks to be products of the same source manufacturer and keyway as other locksets.

1. Manufacturers:

- a. Corbin Russwin Hardware (RU) - ML2000 Series.
- b. Sargent Manufacturing (SA) - 8200 Series.
- c. Schlage (SC) - L9460 Series.

- B. Narrow Case Deadlocks and Deadlatches: ANSI/BHMA 156.13 Series 1000 Grade 1 certified narrow case deadlocks and deadlatches for swinging or sliding door applications. All functions shall be manufactured in a single sized case formed from 12 gauge minimum, corrosion resistant steel (option for fully stainless steel case and components). Provide minimum 2 7/8" throw laminated stainless steel bolt. Bottom rail deadlocks to have 3/8" diameter bolts.

1. Manufacturers:

- a. Adams Rite Manufacturing (AD) - MS1850S / MS1950 Series.

2.9 LOCK AND LATCH STRIKES

- A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:

1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.

- B. Standards: Comply with the following:

1. Strikes for Mortise Locks and Latches: BHMA A156.13.
2. Strikes for Bored Locks and Latches: BHMA A156.2.
3. Strikes for Auxiliary Deadlocks: BHMA A156.36.
4. Dustproof Strikes: BHMA A156.16.

2.10 ELECTRIC STRIKES

- A. Standard Electric Strikes: Heavy duty, cylindrical and mortise lock electric strikes conforming to ANSI/BHMA A156.31, Grade 1, UL listed for both Burglary Resistance and for use on fire rated door assemblies. Stainless steel construction with dual interlocking plunger design tested to exceed 3000 lbs. of static strength and 350 ft-lbs. of dynamic strength. Strikes tested for a minimum 1 million operating cycles. Provide strikes with 12 or 24 VDC capability and supplied standard as fail-secure unless otherwise specified. Provide latchbolt and latchbolt strike monitoring indicating both the position of the latchbolt and locked condition of the strike where specified.

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1. Manufacturers:
 - a. Folger Adam EDC (FO).
 - b. HES (HS).
 - B. Provide electric strikes with in-line power controller and surge suppressor by the same manufacturer as the strike with the combined products having a five year warranty.

2.11 CONVENTIONAL EXIT DEVICES

- A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:
 1. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
 2. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer's catalog and template book for specific requirements.
 3. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
 4. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
 5. Electromechanical Options: Subject to same compliance standards and requirements as mechanical exit devices, electrified devices to be of type and design as specified in hardware sets. Include any specific controllers when conventional power supplies are not sufficient to provide the proper inrush current.
 6. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.
 - a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
 - b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.
 7. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
 8. Rim Exit Devices: Exit device rails shall release with less than 5 pounds of pressure per the California Building Code.

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9. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
 10. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
 11. Rail Sizing: Provide exit device rails factory sized for proper door width application.
 12. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.
 13. Hurricane and Tornado Resistance Compliance: Conventional exit devices are to be U.L. listed for windstorm assemblies where applicable. Provide the appropriate hurricane or tornado resistant products that have been independent third party tested, certified, and labeled to meet state and local windstorm building codes applicable to project.
- B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 certified panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Exit device latch to be stainless steel, pullman type, with deadlock feature.
1. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series.
 - b. Sargent Manufacturing (SA) - 80 Series.
- C. Tube Steel Removable Mullions: ANSI/BHMA A156.3 removable steel mullions with malleable-iron top and bottom retainers and a primed paint finish.
1. Provide keyed removable feature where specified in the Hardware Sets.
 2. Provide stabilizers and mounting brackets as required.
 3. Provide electrical quick connection wiring options as specified in the hardware sets.
 4. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - 700/900 Series.
 - b. Sargent Manufacturing (SA) - 980S Series.

2.12 DOOR CLOSERS

- A. All door closers specified herein shall meet or exceed the following criteria:
1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers including installation and adjusting information on inside of cover.
 2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
 3. Cycle Testing: Provide closers which have surpassed 15 million cycles in a test witnessed and verified by UL.

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4. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the physically handicapped, provide units complying with ANSI ICC/A117.1.
 5. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
 6. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
 7. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.
- B. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units standard.
1. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - DC6000 Series.
 - b. Sargent Manufacturing (SA) - 351 Series.
 - c. Norton Door Controls (NO) - 7500 Series.

2.13 ARCHITECTURAL TRIM

A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1" LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
3. Where plates are applied to fire rated doors with the top of the plate more than 16" above the bottom of the door, provide plates complying with NFPA 80. Consult manufacturer's catalog and template book for specific requirements for size and applications.
4. Protection Plates: ANSI/BHMA A156.6 certified protection plates (kick, armor, or mop), fabricated from the following:
 - a. Stainless Steel: 300 grade, 050-inch thick.

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5. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.
 6. Manufacturers:
 - a. Hager Companies (HA).
 - b. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).
 - c. Trimco (TC).

2.14 DOOR STOPS AND HOLDERS

- A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.
- B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 certified door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.
 1. Manufacturers:
 - a. Hager Companies (HA).
 - b. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).
 - c. Trimco (TC).
- C. Overhead Door Stops and Holders: ANSI/BHMA A156.6, Grade 1 certified overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.
 1. Manufacturers:
 - a. Rixson Door Controls (RF).
 - b. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).
 - c. Sargent Manufacturing (SA).

2.15 ARCHITECTURAL SEALS

- A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.
- B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.

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1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.
 - C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.
 1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NPFA 252, Standard Methods of Fire Tests of Door Assemblies.
 - D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.
 - E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.
 - F. Manufacturers:
 1. National Guard Products (NG).
 2. Pemko Products; ASSA ABLOY Architectural Door Accessories (PE).
 3. Reese Enterprises, Inc. (RE).

2.16 ELECTRONIC ACCESSORIES

- A. Key Switches: Key switches furnished standard with stainless steel single gang face plate with a 12/24VDC bi-color LED indicator. Integral backing bracket permits integration with any 1 1/4" or 1 1/2" mortise type cylinder. Key switches available as momentary or maintained action and in narrow face plate options.
 1. Manufacturers:
 - a. Security Door Controls (SD) - 800 Series.
 - b. Securitron (SU) - MK Series.
- B. Push-Button Switches: Industrial grade momentary or alternate contact, back-lighted push buttons with stainless-steel switch enclosures. 12/24 VDC bi-color illumination suitable for either flush or surface mounting.
 1. Manufacturers:
 - a. Security Door Controls (SD) - 400 Series.
 - b. Securitron (SU) - PB Series.
- C. Door Position Switches: Door position magnetic reed contact switches specifically designed for use in commercial door applications. On recessed models the contact and magnetic housing snap-lock into a 1" diameter hole. Surface mounted models include wide gap distance design complete with armored flex cabling. Provide SPDT, N/O switches with optional Rare Earth Magnet installation on steel doors with flush top channels.
 1. Manufacturers:

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- a. Security Door Controls (SD) - DPS Series.
 - b. Securitron (SU) - DPS Series.
- D. Switching Power Supplies: Provide switching power supplies that are dual voltage, UL listed, supervised units. Units shall be field selectable with a dedicated battery charging circuit that provide 4 Amp at 12VDC or 24VDC continuous, with up to 16 independently controlled power limited outputs. Units shall tolerate brownout or overvoltage input $\pm 15\%$ of nominal voltage and have thermal shutdown protection with auto restart. Circuit breaker shall protect against overcurrent and reverse battery faults and units shall be available with a single relay fire trigger or individually triggered relayed outputs. Provide the least number of units, at the appropriate amperage level, sufficient to exceed the required total draw for the specified electrified hardware and access control equipment.
- 1. Manufacturers:
 - a. Securitron (SU) - AQ Series.

2.17 FABRICATION

- A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.18 FINISHES

- A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.
- B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

- A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.
- B. Wood Doors: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

- A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.
 - 1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.
- B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:
 - 1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
 - 2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
 - 3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
 - 4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.
- C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
- D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."
- E. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 FIELD QUALITY CONTROL

- A. Field Inspection: Supplier will perform a final inspection of installed door hardware and state in report whether work complies with or deviates from requirements, including whether door hardware is properly installed, operating and adjusted.

3.5 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

3.6 CLEANING AND PROTECTION

- A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.
- B. Clean adjacent surfaces soiled by door hardware installation.
- C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DEMONSTRATION

- A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.8 DOOR HARDWARE SETS

- A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.
- B. The supplier is responsible for handing and sizing all products and providing the correct option for the appropriate door type and material where more than one is presented in the hardware sets. Quantities listed are for each pair of doors, or for each single door.
- C. Materials to be furnished in accordance to Premier/ASSA ABLOY GPO Contract #PP-FA-663.
- D. Manufacturer's Abbreviations:

E. Refer to Section 080671, Door Hardware Sets, for hardware sets.

1. MK - McKinney
2. PE - Pemko
3. RO - Rockwood
4. SA - SARGENT
5. AD - Adams Rite
6. SC - Schlage
7. HS - HES
8. RF - Rixson
9. NO - Norton
10. OT - OTHER
11. SU - Securitron

Hardware Sets

Set: 1.0

Doors: 101

Description: Ext AL Pr - Access Control - AOx2 - CVR

6 Hinge (heavy weight)	T4A3386 NRP	US32D	MK
2 Hinge (heavy weight)	T4A3386 QC* NRP	US32D	MK
1 Exit Device (nightlatch)	LC 16 55 56 AD8410 106 x 862	US10BE	SA
1 Concealed Vert Rod Exit	16 55 56 AD8410 862	US10BE	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Cylinder Housing	Cylinder as required	Match	SC
2 Automatic Opener	6330	690	NO
1 Threshold	2005DT		PE
1 Perimeter Seal	By door manufacturer		OT
1 Rain Guard	346D		PE
2 Sweep	345D		PE
1 Card Reader	By Security Contractor		OT
2 ElectroLynx Harness	QC-C1500P		MK
2 ElectroLynx Harness	QC-C***P		MK
2 Position Switch	DPS-M-BK		SU
1 Keyswitch	4370 Series	US32D	SA
2 Door Switch	501		NO
1 Power Supply	AQD Series		SU

Notes: Doors are normally closed and secure. Pushing door switch at either side of door will initiate auto operator sequence and automatically open both doors. Keyswitch at exterior will deactivate the door push switch for after hours security. Upon loss of power, doors will remain secure. Free egress at all times. Cylinder dogging. Hardware specified is for design intent of windstorm openings. Confirm with door/frame manufacturer that the hardware provided is compliant with the door/frame manufacturer's assembly testing for windstorm/hurricane and meets the project's location requirements for design pressure.

Set: 1.1

Doors: 122

Description: Int AL Pr - CVR - Access Control

2 Continuous Hinge	_FM__SLF-HD1 SER		PE
1 Exit Device (exit only)	16 55 8810 862	US32D	SA
1 Exit Device (nightlatch)	LC 16 55 56 AD8410 106 x 862	US10BE	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Cylinder Housing	Cylinder as required	Match	SC
2 Door Closer	351 CPS brk/spacer as req	EB	SA
2 Drop Plate	351D as required	EB	SA
1 Perimeter Seal	By door manufacturer		OT
1 Card Reader	By Security Contractor		OT
1 ElectroLynx Harness	QC-C1500P		MK
1 ElectroLynx Harness	QC-C***P		MK
1 Power Supply	AQD Series		SU

Notes: Doors are normally closed and secure. Upon loss of power, doors will remain secure. Free egress at all times. Cylinder dogging.

Set: 2.0

Doors: 196A, 196G, 196H, 196I

Description: Pr Alum - Push/Pull - Deadlock

2 Continuous Hinge	_FM__SLF-HD1	Match Door	PE
2 Flush Bolt	555	US10BE	RO
1 Mortise Deadlock	MS1850S	313	AD
1 Thumbturn Cylinder	4066-01	313	AD
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Cylinder Housing	Cylinder as required	Match	SC
2 Push Bar & Pull	BF15747	313	RO
2 Door Closer	351 CPS brk/spacer as req	EB	SA
1 Threshold	2005DT		PE
1 Perimeter Seal	By door manufacturer		OT
1 Rain Guard	346D		PE
2 Sweep	345D		PE

Set: 3.0

Doors: 185

Description: Ext Pr - AOx1 - Rim x Rim x Rem Mull

6 Hinge (heavy weight)	T4A3386 NRP	US32D	MK
2 Hinge (heavy weight)	T4A3386 QC* NRP	US32D	MK
1 Removable Mullion	HCL980	PC	SA
1 Exit Device (storeroom)	HC LC 16 55 56 8804 862	US32D	SA
1 Exit Device (exit only)	HC 16 55 8810 862	US32D	SA
2 Permanent Core	LFIC Core (Match existing)	626	SC

2 Cylinder Housing	Cylinder as required	Match	SC
1 Door Closer	351 CPS brkt/spacer as req	EN	SA
1 Automatic Opener (Push)	6330	689	NO
2 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Threshold	2005AT		PE
1 Gasketing	2891APK		PE
1 Rain Guard	346C		PE
2 Sweep	345C		PE
2 Astragal	18041CNB		PE
2 ElectroLynx Harness	QC-C1500P		MK
2 ElectroLynx Harness	QC-C***P		MK
2 Position Switch	DPS-M-BK		SU
1 Keyswitch	4370 Series	US32D	SA
2 Door Switch	501		NO
1 Power Supply	AQD Series		SU

Notes: Doors are normally closed and secure. Pushing door switch at either side of door will initiate auto operator sequence and automatically open one door. Keyswitch at exterior will deactivate the door push switch for after hours security. Upon loss of power, doors will remain secure. Free egress at all times. Hardware specified is for design intent of windstorm openings. Confirm with door/frame manufacturer that the hardware provided is compliant with the door/frame manufacturer's assembly testing for windstorm/hurricane and meets the project's location requirements for design pressure.

Set: 4.0

Doors: 183A

Description: Ext Pr - Access Control - AOx1 - Rim x Rim x Rem Mull

6 Hinge (heavy weight)	T4A3386 NRP	US32D	MK
2 Hinge (heavy weight)	T4A3386 QC* NRP	US32D	MK
1 Exit Device (nightlatch)	LC 16 55 56 AD8410 106 x 862	US10BE	SA
1 Concealed Vert Rod Exit	16 55 56 AD8410 862	US10BE	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Cylinder Housing	Cylinder as required	Match	SC
1 Door Closer	351 CPS brk/spacer as req	EB	SA
1 Drop Plate	351D as required	EB	SA
1 Automatic Opener	6330	690	NO
1 Threshold	2005DT		PE
1 Perimeter Seal	By door manufacturer		OT
1 Rain Guard	346D		PE
2 Sweep	345D		PE
1 Card Reader	By Security Contractor		OT
2 ElectroLynx Harness	QC-C1500P		MK
2 ElectroLynx Harness	QC-C***P		MK
2 Position Switch	DPS-M-BK		SU
2 Door Switch	501		NO
1 Power Supply	AQD Series		SU

Notes: Doors are normally closed and secure. Valid credential at card reader will retract latches and initiate auto operator sequence. Pushing door switch at secure side of door will initiate auto operator sequence and automatically open one door. Keyswitch at exterior will deactivate the door push switch for after hours security. Upon loss of power, doors will remain secure. Free egress at all times. Cylinder dogging Hardware specified is for design intent of windstorm openings. Confirm with door/frame manufacturer that the hardware provided is compliant with the door/frame manufacturer's assembly testing for windstorm/hurricane and meets the project's location requirements for design pressure.

Set: 5.0

Doors: 174, 200

Description: Ext Sgl Exit Only

4 Hinge (heavy weight)	T4A3386 NRP	US32D	MK
1 Exit Device (exit only)	HC 8810	US32D	SA
1 Door Closer	351 CPS brkt/spacer as req	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Threshold	2005AT		PE
1 Gasketing	2891APK		PE
1 Rain Guard	346C		PE
1 Sweep	345C		PE

Notes: Hardware specified is for design intent of windstorm openings. Confirm with door/frame manufacturer that the hardware provided is compliant with the door/frame manufacturer's assembly testing for windstorm/hurricane and meets the project's location requirements for design pressure.

Set: 5.1

Doors: 201

Description: Ext Sgl Storeroom

4 Hinge (heavy weight)	T4A3386 NRP	US32D	MK
1 Storeroom Deadbolt Lock	LC 8251 LL	US32D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Cylinder Housing	Cylinder as required	Match	SC
1 Door Closer	351 CPS brkt/spacer as req	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Threshold	2005AT		PE
1 Gasketing	2891APK		PE
1 Rain Guard	346C		PE
1 Sweep	345C		PE

Notes: Hardware specified is for design intent of windstorm openings. Confirm with door/frame manufacturer that the hardware provided is compliant with the door/frame manufacturer's assembly testing for windstorm/hurricane and meets the project's location requirements for design pressure.

Set: 6.0

Doors: 196E, 196F

Description: Ext Sgl Lock

3 Hinge (heavy weight)	T4A3386 NRP	US32D	MK
1 Dormitory Lock	LC 8225 LL	US32D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Cylinder Housing	Cylinder as required	Match	SC
1 Door Closer	351 CPS brkt/spacer as req	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Threshold	2005AT		PE
1 Gasketing	2891APK		PE
1 Rain Guard	346C		PE
1 Sweep	345C		PE

Notes: Hardware specified is for design intent of windstorm openings. Confirm with door/frame manufacturer that the hardware provided is compliant with the door/frame manufacturer's assembly testing for windstorm/hurricane and meets the project's location requirements for design pressure.

Set: 7.0

Doors: 109B, 117, 149, 193

Description: Ext Sgl Access Control Exit

3 Hinge (heavy weight)	T4A3386 NRP	US32D	MK
1 Hinge (heavy weight)	T4A3386 QC* NRP	US32D	MK
1 Exit Device (storeroom)	HC LC 16 55 56 8804 862	US32D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Cylinder Housing	Cylinder as required	Match	SC
1 Door Closer	351 CPS brkt/spacer as req	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Threshold	2005AT		PE
1 Gasketing	2891APK		PE
1 Rain Guard	346C		PE
1 Sweep	345C		PE
1 Card Reader	By Security Contractor		OT
1 ElectroLynx Harness	QC-C1500P		MK
1 ElectroLynx Harness	QC-C***P		MK
1 Position Switch	DPS-M-BK		SU
1 Power Supply	AQD Series		SU

Notes: Door is normally closed and secure. Presentation of valid credential will allow entry by pull. Upon loss of power, door will remain secure. Free egress at all times. Door bell if required is by security. Hardware specified is for design intent of windstorm openings. Confirm with door/frame manufacturer that the hardware provided is compliant with the door/frame manufacturer's assembly testing for windstorm/hurricane and meets the project's location requirements for design pressure.

Set: 8.0

Doors: 126A, 126B

Description: Pr Storeroom - Stop / HO

6 Hinge	TA2714	US26D	MK
2 Flush Bolt	555	US26D	RO
1 Dust Proof Strike	570	US26D	RO
1 Storeroom Lock	LC 28 10G04 LL	US26D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
2 Door Stop & Holder	491-RKW	US26D	RO
2 Silencer	608-RKW		RO

Set: 9.0

Doors: 107, 136, 161, 207

Description: Pr Storeroom - COHS

6 Hinge	TA2714	US26D	MK
2 Flush Bolt	555	US26D	RO
1 Dust Proof Strike	570	US26D	RO
1 Storeroom Lock	LC 28 10G04 LL	US26D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
2 Conc Overhead Stop	2-X36	689	RF
2 Silencer	608-RKW		RO

Set: 10.0

Doors: 120B

Description: Pr Office - COHS

6 Hinge	TA2714	US26D	MK
2 Flush Bolt	555	US26D	RO
1 Dust Proof Strike	570	US26D	RO
1 Office Lock	LC 28 10G05 LL	US26D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
2 Conc Overhead Stop	2-X36	689	RF
2 Silencer	608-RKW		RO

Set: 11.0

Doors: 123

Description: Pr Passage - Closer / COHS

2 Continuous Hinge	_FM_SLF-HD1	Match Door	PE
2 Push Bar & Pull	BF15747	313	RO
2 Door Closer	351 CPS brk/spacer as req	EB	SA
2 Drop Plate	351D as required	EB	SA
1 Perimeter Seal	By door manufacturer		OT

Set: 12.0

Description: Pr Classroom - Closer / Stop AFB

6 Hinge	TA2714	US26D	MK
1 Dust Proof Strike	570	US26D	RO
1 Flush Bolt	2842 / 2942	US26D	RO
1 Classroom Lock	LC 28 10G37 LL	US26D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Coordinator	2672	US28	RO
1 Mounting Bracket	2601AB	US28	RO
2 Door Closer	351 PS	EN	SA
2 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
2 Silencer	608-RKW		RO

Set: 13.0

Doors: 183B

Description: Int Pr - Push/Pull - AO x 1

2 Continuous Hinge	_FM_SLF-HD1	Match Door	PE
2 Push Bar & Pull	BF15747	313	RO
2 Automatic Opener	6310	690	NO
1 Perimeter Seal	By door manufacturer		OT
2 Door Switch	501		NO

Notes: Power and wiring by security contractor. Wall switch by either side will initiate auto operator sequence on one leaf. Manual closer on adjacent leaf.

Set: 14.0

Doors: 113

Description: Int Sgl - Double Cylinder - ES - Access Control

3 Hinge	TA2714	US26D	MK
1 Utility/Asylum/Institutional Lock	LC 10G17 LL	US26D	SA
2 Permanent Core	LFIC Core (Match existing)	626	SC
1 Electric Strike	4500C	630	HS
1 SMART Pac Bridge Rectifier	2005M3		HS
1 Door Closer	351 O/P9 as required	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Wall Stop	409 / 441CU as req	US26D	RO
1 Gasketing	S88BL LAR		PE
2 Card Reader	By Security Contractor		OT
1 ElectroLynx Harness	QC-C1500P		MK
1 Power Supply	AQD Series		SU

Notes: Door is normally closed and secure. Presentation of valid credential from either side will energize electric strike to allow entry by pull. Upon loss of power, door will remain secure. Verify with AHJ that this locking arrangement is allowed, free egress is not allowed fro either side.

Set: 15.0

Doors: 121, 127, 137, 143B, 158B

Description: Int Sgl Access Control Lock

2 Hinge	TA2714	US26D	MK
1 Hinge	TA2714 QC*	US26D	MK
1 Fail Secure Lock	LC 10G71 LL	US26D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Door Closer	351 O/P9 as required	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Wall Stop	409 / 441CU as req	US26D	RO
1 Gasketing	S88BL LAR		PE
1 Card Reader	By Security Contractor		OT
1 ElectroLynx Harness	QC-C1500P		MK
1 ElectroLynx Harness	QC-C***P		MK
1 Power Supply	AQD Series		SU

Notes: Door is normally closed and secure. Presentation of valid credential will allow entry by trim. Upon loss of power, door will remain secure. Free egress at all times.

Set: 16.0

Doors: 109A, 143A, 189

Description: Int Sgl Access Control Lock - Remote Release

2 Hinge	TA2714	US26D	MK
1 Hinge	TA2714 QC*	US26D	MK
1 Fail Secure Lock	LC 10G71 LL	US26D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Door Closer	351 O/P9 as required	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Wall Stop	409 / 441CU as req	US26D	RO
1 Gasketing	S88BL LAR		PE
1 Card Reader	By Security Contractor		OT
1 ElectroLynx Harness	QC-C1500P		MK
1 ElectroLynx Harness	QC-C***P		MK
1 Push Button	PB4L-2		SU
1 Power Supply	AQD Series		SU

Notes: Door is normally closed and secure. Presentation of valid credential will allow entry by trim. Upon loss of power, door will remain secure. Free egress at all times. Push button at reception for remote door release, wiring is by security contractor.

Set: 17.0

Doors: 173

Description: Int Sgl Access Control Exit - Closer/Stop

2 Hinge	TA2714	US26D	MK
1 Hinge	TA2714 QC*	US26D	MK
1 Electrified Rim Exit	LC 8876-24v ETL	US32D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Cylinder Housing	Cylinder as required	Match	SC
1 Door Closer	351 CPS brkt/spacer as req	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Gasketing	S88BL LAR		PE
1 Card Reader	By Security Contractor		OT
1 ElectroLynx Harness	QC-C1500P		MK
1 ElectroLynx Harness	QC-C***P		MK
1 Power Supply	AQD Series		SU

Notes: Door is normally closed and secure. Presentation of valid credential will allow entry by trim. Upon loss of power, door will remain secure. Free egress at all times.

Set: 18.0

Doors: 118

Description: Int Sgl Access Control- Rated

2 Hinge	TA2714	US26D	MK
1 Hinge	TA2714 QC*	US26D	MK
1 Fail Secure Lock	LC 10G71 LL	US26D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Door Closer	351 O/P9 as required	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Wall Stop	409 / 441CU as req	US26D	RO
1 Gasketing	S88BL LAR		PE
1 Card Reader	By Security Contractor		OT
1 ElectroLynx Harness	QC-C1500P		MK
1 ElectroLynx Harness	QC-C***P		MK
1 Power Supply	AQD Series		SU

Notes: Door is normally closed and secure. Presentation of valid credential will allow entry by trim. Upon loss of power, door will remain secure. Free egress at all times.

Set: 19.0

Doors: 156

Description: Storeroom - Closer - Gasket

3 Hinge	TA2714	US26D	MK
1 Storeroom Lock	LC 28 10G04 LL	US26D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Door Closer	351 O/P9 as required	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Wall Stop	409 / 441CU as req	US26D	RO
1 Gasketing	S88BL LAR		PE

Set: 20.0

Doors: 184, 203, 204

Description: Storeroom - Closer/Stop - Gasket

3 Hinge	TA2714	US26D	MK
1 Storeroom Lock	LC 28 10G04 LL	US26D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Door Closer	351 PS	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Gasketing	S88BL LAR		PE

Set: 21.0

Doors: 188

Description: Storeroom

3 Hinge	TA2714	US26D	MK
1 Storeroom Lock	LC 28 10G04 LL	US26D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Wall Stop	409 / 441CU as req	US26D	RO
3 Silencer	608-RKW		RO

Set: 22.0

Doors: 103, 104A, 104B, 108, 110, 114, 115, 119, 129, 130, 131, 132, 135, 138, 139, 141, 142, 144, 145, 146, 147, 148, 151, 152, 164, 165, 166, 167, 168, 169, 175, 176, 179, 180, 181, 182, 192, 194, 205, 206

Description: Office

3 Hinge	TA2714	US26D	MK
1 Office Lock	LC 28 10G05 LL	US26D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Wall Stop	409 / 441CU as req	US26D	RO
3 Silencer	608-RKW		RO
1 Coat Hook	RM801	US32D	RO

Set: 23.0

Description: Office - COH Hold Open

3 Hinge	TA2714	US26D	MK
1 Office Lock	LC 28 10G05 LL	US26D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Conc Overhead Hold Open	2-X26	689	RF
3 Silencer	608-RKW		RO

Set: 24.0

Doors: 112, 140A, 140B, 177A, 177B, 195

Description: Passage

3 Hinge	TA2714	US26D	MK
1 Passage Latch	28 10U15 LL	US26D	SA
1 Wall Stop	409 / 441CU as req	US26D	RO
3 Silencer	608-RKW		RO

Set: 24.1

Doors: 196B, 196D, 197B

Description: Classroom - Closer/Stop

3 Hinge	TA2714	US26D	MK
1 Classroom Lock	LC 28 10G37 LL	US26D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Cylinder Housing	Cylinder as required	Match	SC
2 Door Closer	351 PS	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Wall Stop	409 / 441CU as req	US26D	RO
3 Silencer	608-RKW		RO

Set: 25.0

Doors: 124, 153, 158A

Description: Classroom - Closer

3 Hinge	TA2714	US26D	MK
1 Classroom Lock	LC 28 10G37 LL	US26D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Door Closer	351 O/P9 as required	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Wall Stop	409 / 441CU as req	US26D	RO
3 Silencer	608-RKW		RO

Set: 26.0

Doors: 125A

Description: Classroom - OH Stop

3 Hinge	TA2714	US26D	MK
1 Classroom Lock	LC 28 10G37 LL	US26D	SA
1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Conc Overhead Stop	2-X36	689	RF
3 Silencer	608-RKW		RO

Set: 27.0

Doors: 105, 111, 186, 190, 202

Description: Privacy - Closer - Gasket

3 Hinge	TA2714	US26D	MK
1 Privacy Lock	28 10U65 LL	US26D	SA
1 Door Closer	351 O/P9 as required	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Wall Stop	409 / 441CU as req	US26D	RO
1 Gasketing	S88BL LAR		PE

Set: 28.0

Doors: 106, 155, 157

Description: Push/Pull - Closer

3 Hinge	TA2714	US26D	MK
1 Pull Plate	111x70C	US32D	RO
1 Push Plate	70C-RKW	US32D	RO
1 Door Closer	351 O/P9 as required	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK	US32D	RO
1 Wall Stop	409 / 441CU as req	US26D	RO
3 Silencer	608-RKW		RO

Set: 29.0

Doors: 120A

Description: Overhead

1 Permanent Core	LFIC Core (Match existing)	626	SC
1 Cylinder Housing	Cylinder as required	Match	SC
1 Balance Hardware	By the door manufacturer		OT

Notes: Confirm cylinder type required with door supplier.

END OF SECTION